

## REMARKS

1. Reconsideration and further examination of the subject patent application in light of the present Amendment and Remarks is respectfully requested. Claims 1-20 are currently pending in the application and stand rejected under a final rejection. The specification has been objected to as not providing proper antecedent basis. Claims 1-20 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1-10, 13, 14-20 have been rejected under 35 U.S.C. §103(a) as being obvious over German No. 1,923,305 to Ver Deutsch Metallwerke AG in view of U.S. Patent No. 3,744,835 to Carbone et al. and U.S. Patent No. 6,164,709 to Kuczynski et al.. Claim 11 has been rejected under 35 U.S.C. §103(a) as being obvious over Ver Deutsche Metallwerke AG in view of Carbone et al., Kuczynski et al. and U.S. Patent No. 5,799,991 to Glance. Claim 12 has been rejected under 35 U.S.C. §103(a) as being obvious over Ver Deutsche Metallwerke AG in view of Carbone et al., Kuczynski et al. and U.S. Patent No. 6,264,454 to Hale. After a careful review of the claims (as amended), it has been concluded that the rejections are in error and the rejections are, therefore, traversed.

2. The specification has been objected to as not providing proper antecedent basis for claim 4. In response, claim 4 has been cancelled.

3. Claims 1-20 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as set forth in paragraph 2 of the Office Action. In response, claim 1 has been further limited to removal and replacement of the matrix from an open end of the exposed recess. The open



end of the exposed recess is clearly shown in FIGs. 11 and 12. Claim 1 has been further limited to support of the matrix by the recess. The support of the matrix by the recess is also clearly shown in FIGs. 11 and 12. Claim 4 has been cancelled.

4. Claims 1-10, 13, 14-20 have been rejected under 35 U.S.C. §103(a) as being obvious over German No. 1,923,305 to Ver Deutsch Metallwerke AG in view of U.S. Patent No. 3,744,835 to Carbone et al. In particular, the Examiner asserts that

“Ver Deutsche Metallwerke AG shows elongated beam 5, foam portion 3, fascia surrounding same being common knowledge in the art, a recess in the foam portion, and a metallic cylindrical cell matrix of hexagonal shape disposed in the recess and configured to absorb energy. The recess abuts a portion of the beam. The matrix is removably secured within the recess after formation of the foam portion by destructive cutting of the foam around a portion of the periphery.

Carbone et al. teaches a fascia 17 encapsulating a cylindrical cell matrix made of plastic or metal. Carbone et al. also teaches a hexagonal shape, but mentions also that the shape may be ‘any other suitable geometrical shape’. It would have been obvious to one of ordinary skill in the art to provide in Ver Deutsche Metallwerke AG a fascia and plastic material as taught by Carbone et al. as a known alternative in the art. At the time of the invention, it was known in the art, for example to utilize plastic as a weight savings.

Kuczynski et al. teaches that a cellular member within a foam substrate may be configured as a circular cylinder. As a result of this teaching, predating the disclosure of applicant, It would have been obvious to one of ordinary skill to provide in the references above a circular member as taught by Kuczynski et al. for its known absorption characteristics.”

It is noted first, in this regard that the claims are limited to “a fascia surrounding the foam portion, the fascia and the foam portion operatively attached to the beam . . . the foam portion having at least one recess formed therein . . . a non-metallic circular cell matrix disposed in and supported by the at least one matrix”. Further, the specification explicitly states that “The fascia 206 and the foam portion 204 are operatively attached to the beam via a bonding or brackets”



(specification, page 11, lines 24-27).

In contrast, Ver Deutsche Metallwerke AG does not have a fascia. The Ver Deutsche Metallwerke AG shock arresting elements 4,6 are also supported and enclosed by a plate casing 7, 8 that is in turn connected to the cross-beam 5.

Similarly, Carbone et al. shows a plastic shell surrounding a honeycomb core 16. In this regard, Carbone et al. explicitly states that “The honeycomb core is covered by a rubber, metal or plastic shell 17 . . . is attached to the vehicle by a pair of T-bolts 19 which are fastened by nuts 20 on fender 18” (Carbone et al., col. 2, lines 28-34). Kuczynski et al. merely shows insert sheets 35 supported by attachment to a steel beam 25.

As such, the combination of Ver Deutsche Metallwerke AG, Carbone et al. and Kuczynski et al. fails to teach or suggest a cell matrix supported by a foam portion, where the foam portion and fascia portion are operatively connected to the elongated beam. Further, a person of skill in the art would recognize the inherent advantages of a cell matrix that is able to move with the foam and fascia portion of the bumper during a collision rather than being rigidly attached to the beam.

In addition, a person of skill in the art would also recognize that enclosing the Ver Deutsche Metallwerke AG shock arresting elements 4, 6 in the plate casing 7, 8 would prevent removal of the shock arresting elements 4,6. Since the Ver Deutsche Metallwerke AG shock arresting elements 4, 6 are not removable, Ver Deutsche Metallwerke AG does not meet the express limitations of the claimed invention.

For any of the above reasons, the combination of Ver Deutsche Metallwerke AG, Carbone et al. and Kuczynski et al. fails to teach or suggest each and every claim limitation. Since the combination fails to teach each and every claim limitation, the rejection is believed to be improper



and should be withdrawn.

5. Claim 11 has been rejected as being obvious over Ver Deutsche Metallwerke AG in view of Carbone et al., Kuczynski et al. and Gance. However, a review of Gance reveal that Gance also fails to teach or suggest a cell matrix supported by a foam portion, where the foam portion and fascia portion are operatively connected to the elongated beam. Since the combination of Ver Deutsche Metallwerke AG, Carbone et al., Kuczynski et al. and Gance fails to teach or suggest this claim element, the rejection is believed to be improper and should be withdrawn.

6. Claim 12 has been rejected under 35 U.S.C. §103(a) as being obvious over Ver Deutsche Metallwerke AG in view of Carbone et al., Kuczynski et al. and Hale. However, a review of Hale reveal that Hale also fails to teach or suggest a cell matrix supported by a foam portion, where the foam portion and fascia portion are operatively connected to the elongated beam. Since the combination of Ver Deutsche Metallwerke AG, Carbone et al., Kuczynski et al. and Hale fails to teach or suggest this claim element, the rejection is believed to be improper and should be withdrawn.

7. For the foregoing reasons, applicants submit that the subject application is in condition for allowance and earnestly solicit an early Notice of Allowance. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, the Examiner is respectfully requested to call the undersigned at the below-listed number.

The Commissioner is hereby authorized to charge any additional fee which may be required

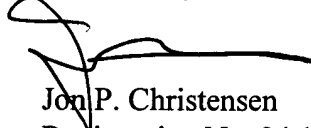


for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,

WELSH & KATZ, LTD.

By

  
Jon P. Christensen  
Registration No. 34,137

WELSH & KATZ, LTD.  
120 South Riverside Plaza  
22nd Floor  
Chicago, Illinois 60606  
(312) 655-1500  
April 7, 2003